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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,668	09/30/2003	Juan J. Becerra	107044-0012P1	5796
24267	7590	08/03/2006		
CESARI AND MCKENNA, LLP 88 BLACK FALCON AVENUE BOSTON, MA 02210			EXAMINER ALEJANDRO, RAYMOND	
			ART UNIT	PAPER NUMBER
			1745	
DATE MAILED: 08/03/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/675,668

Applicant(s)

BECERRA ET AL.

Examiner

Raymond Alejandro

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 7-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3 IDS(see item 10)</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-6, drawn to a liquid feed fuel cell system, classified in class 429, subclass 34
  - II. Claims 7-8, drawn to an effluent container, classified in class 222, subclass 562.
  - III. Claims 9-14, drawn to methods of removing effluent from a fuel cell or delivering fuel thereto, classified in class 429, subclass 13.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination of Group I comprises a fuel container which does not require the particulars of the effluent container recited in the subcombination of Group II. Thus, they do not meet the  $A_{sp}B_{sp}$  and  $B_{sp}$  requirement, hence, restriction is proper. The subcombination has separate utility such as providing a container or receptacle for holding any material.
3. Inventions III and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the

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apparatus as claimed can be used to practice another and materially different process, the two different or mutually exclusive methods recited in respective claims 9 and 11 is evidence that the fuel cell system can be used to practice materially different process; additionally, the fuel cell system does not require the specific container for operation; and can be used with a container which only feeds reactant but does not remove effluent.

4. Inventions II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions have different designs, modes of operation, and effects, for instance, the invention of Group II corresponds to a container per se suitable for holding a substance, whereas the invention of Group III is geared toward a method of delivering fuel or removing effluent from a fuel cell.

5. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

6. Because these inventions are independent or distinct for the reasons given above and the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

7. During a telephone conversation with Rita Rooney on 08/01/06 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-6. Affirmation of this election must be made by applicant in replying to this Office action. Claims 7-14 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Priority***

9. This application is a continuation-in-part of Application No. 10/041301, filed 01/08/02.

This application repeats a substantial portion of the foregoing prior application; and adds and claims additional disclosure not presented in the prior application. Since this application names an inventor or inventors named in the prior application, it constitute a continuation-in-part of the prior application. However, the disclosure of the prior-filed application, Application No. 10/041301, fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application. For instance, the inventive concept of claim 1, thereby all of its dependent claims, specifically claiming the particular container having “*the first inner bladder*” in combination (as a whole) with “*the second inner bladder for receiving effluent from said fuel cell through an effluent inlet leading from said fuel cell into said fuel container*”, the specific “*coupling to either the anode/cathode aspects*”, and the use of “*a pump*” are not supported by the parent case. The closest disclosure of the Application’301 which might provide support is the embodiments disclosed and illustrated in Figures 11-12. However, a careful reading and understanding thereof fails to provide reasonable support for the inventive concept at hand. At most, Figure 11 only supports a fuel container

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comprising a delivery system and a single inner cartridge enclosing a single collapsible bag or flexible bladder and delivery of fuel without the need of a pump. On the other hand, Figure 12 at best supports a fuel container and a fuel assembly including a disposable container that encloses dual fuel bladders (or bags) to enable delivery of different fuel concentrations to the fuel cell. However, the embodiments of Figures 11-12, as illustrated and discussed in the specification of Application'301, fall short of enabling or furnishing a fuel container comprising dual fuel bladders (or bags) for simultaneous delivery of fuel to the fuel cell and removal (receiving) of exhaust (effluent) from the fuel cell as instantly claimed. In addition to that, the specific coupling to the anode/cathode aspect and the specific use of a pump is not supported, either. Therefore, domestic priority under 35 USC 120 is not granted to the specific inventive concept at issue.

### ***Information Disclosure Statement***

10. The information disclosure statements (IDS) submitted on 01/20/04, 10/18/04 and 05/11/06 were considered by the examiner.

### ***Drawings***

11. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 220, 2231, 76, 1015, 1016 and 1105. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing

date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

12. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 12, 28, 300, 524b, 724 and 1002. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

13. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

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The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

14. The disclosure is objected to because of the following informalities: the current status (whether abandoned or patented and its patent #) of the parent application should be updated.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

16. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Prasad et al 2003/0082427.

The present application is geared toward a liquid fuel cell system wherein the disclosed inventive concept comprises the specific fuel container having first and second inner bladders.

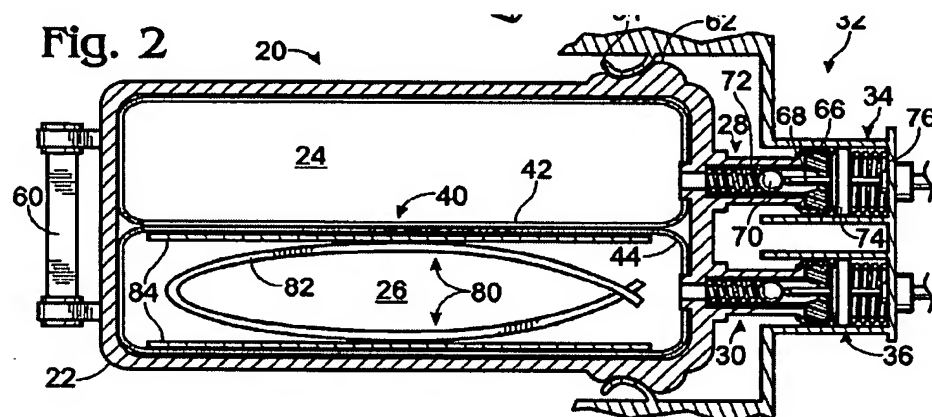
As to claim 1:

Prasad et al disclose a fuel cell system including a direct methanol fuel cell (P0025, 0045); the fuel cell includes electrode and an electrolyte disposed therebetween (P0002); a fuel supply including fuel storage area 24 configured to hold a fuel solution, a fuel solution outlet 28 configured to pass the fuel solution from the fuel storage area 24; a waste storage area 26, a waste inlet 30 configured to pass waste into the waste storage area 26 and a movable barrier 40

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separating the fuel storage area 24 and the waste storage area 26 and configured to move as fuel solution is passed from the area 24 and waste solution is passed into area 26 to simultaneously decrease the volume of area 24 and increase the volume of area 26 (ABSTRACT).

**Figure 2** clearly illustrates the fuel container design:



As to claims 2-3:

Prasad et al disclose that waste storage area 26 receives waste from the fuel cell (ABSTRACT/P0036). *Thus, it can be asserted that waste storage area 26 receives fuel cell exhaust from both the anode and the cathode.*

As to claim 4:

Prasad et al disclose the presence of a pressurizer or any suitable mechanism to pressurize fuel storage area; the pressurizer can be in the form of a spring (P0039).

As to claims 5-6:

The fuel delivery system of Prasad et al can also include a pump (P0056) and/or valve means associated with respective outlet/inlets (P0036). *These features permit to control the fuel/effluent flow. The limitation "valve means associated with..." has not been construed as*

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*invoking 112, 6<sup>th</sup> paragraph because it does not comply with at least one of three prongs requirement.*

Thus, the present claims are anticipated.


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond Alejandro whose telephone number is (571) 272-1282. The examiner can normally be reached on Monday-Thursday (8:00 am - 6:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Raymond Alejandro  
Primary Examiner  
Art Unit 1745



**RAYMOND ALEJANDRO**  
**PRIMARY EXAMINER**